

DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
Washington, DC 20314-1000

EM 1110-2-2704

CECW-ET

Manual  
No. 1110-2-2704

1 January 1999

Engineering and Design  
**CATHODIC PROTECTION SYSTEMS FOR CIVIL WORKS STRUCTURES**

**Table of Contents**

Subject	Paragraph	Page	Subject	Paragraph	Page
<b>Chapter 1</b>			<b>Chapter 6</b>		
<b>Introduction</b>			<b>System Design, Construction, Operation, Maintenance, and Restoration</b>		
Purpose and Scope .....	1-1	1-1	Design .....	6-1	6-1
Applicability .....	1-2	1-1	Construction .....	6-2	6-1
References .....	1-3	1-1	Operation and Maintenance .....	6-3	6-2
Background .....	1-4	1-1	Restoration .....	6-4	6-2
<b>Chapter 2</b>			<b>Chapter 7</b>		
<b>Corrosion Mitigation Plan</b>			<b>Training and Services</b>		
Corrosion Protection Coordinator ..	2-1	2-1	Training .....	7-1	7-1
Plan .....	2-2	2-1	Services .....	7-2	7-1
Tests and Adjustments .....	2-3	2-1			
<b>Chapter 3</b>			<b>Appendix A</b>		
<b>Expert Assistance</b>			<b>Sample Corrosion Mitigation Plan</b>		
Background .....	3-1	3-1			
Expertise .....	3-2	3-1	<b>Appendix B</b>		
Assistance .....	3-3	3-1	<b>Detailed Cathodic Protection Design Procedures for Pike Island Auxiliary Lock Gates</b>		
Element Responsibility .....	3-4	3-1			
<b>Chapter 4</b>					
<b>Testing and Optimizing</b>					
Equipment and Personnel .....	4-1	4-1			
Optimizing System .....	4-2	4-1			
<b>Chapter 5</b>					
<b>System Selection</b>					
Corrosion Protection .....	5-1	5-1			
Types of CPS's .....	5-2	5-1			
CPS Selection .....	5-3	5-1			